

Putting Green into Action

TAKING A DEEP BREATH

Good air quality benefits everyone, especially people with allergies and children with asthma.

- Incorporate whole-house ventilation and ceiling fans.
- Use eco-friendly adhesives, sealants, paints, coatings and carpeting that emit low levels of volatile organic compounds.
- Install entryway dirt-capturing systems. Use good quality air filters and change them regularly.
- Clean your house with biodegradable, environmentally friendly cleaning products.

RECYCLING CONSTRUCTION WASTE

Throughout the building process, as well as after, be sure to recycle waste materials.

- During excavation, stockpile and reuse excavated topsoil.
- Collect shipping boxes, wood scraps, metal and other construction waste to recycle or sell for salvage.
- Buy, sell or donate used construction supplies. Check stores and websites for everything from insulation, windows and doors to tiles, appliances and more.
- When installing new carpets, choose those made from recycled materials and recycle your old carpets.
- Take used batteries, fluorescent bulbs, unwanted chemicals and paints to recycling or hazardous waste collection facilities.
- Include recyclable material storage areas.

PUTTING GREEN INTO ACTION

Simple changes are all it takes for you to be more environmentally friendly in your everyday life.

- Replace incandescent bulbs with fluorescent bulbs.



- Turn off unnecessary lighting fixtures, both indoors and outdoors. Install lighting timers or sensors to automatically turn off lights when not needed.
- In winter, lower the thermostat a few degrees and put on a sweater. Close blinds in the summer and minimize cooking during the heat of the day.

FINDING USEFUL INFORMATION

A number of resources are available on green and sustainable building requirements. Here are some of the well-known green and sustainable building rating systems and standards.

- The International Code Council® (ICC®) and the National Association of Home Builders (NAHB) are developing a standard to address green home building construction practices. To learn more about the ICC/NAHB/ANSI National Green Building Standard, visit www.iccsafe.org/green or www.nahb.org/greenbuilding.
- NAHB Model Green Home Building Guidelines. Available at www.nahb.org.
- The Leadership in Energy and Environmental Design (LEED) Green Building Rating System is a benchmark developed by the United States Green Building Council (USGBC). Learn more at www.usgbc.org.
- American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE)/USGBC/Illuminating Engineering Society of North America (IESNA) 189.1 Standard for High-Performance Green Buildings Except Low-Rise Residential Buildings. Visit www.ashrae.org.
- The Green Building Initiative (GBI) develops the GBI/Green Globes rating system and standard. Available at www.thegbi.org.

Support Building Safety!

For more information about building safety codes and local requirements, contact your local building department below:



dcra.dc.gov
(202) 442-4400



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People Helping People Build a Safer World™

Building Green—Living Better



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Building Green—Living Better

Whether you’re building a house from scratch or looking to increase the energy efficiency of your home, there are a number of things you can do to make your home more sustainable and green.

Buildings have an enormous impact on the environment. Their design, construction and operation account for more than 40 percent of energy used and pollution generated in the United States, according to a 2002 whitepaper by the U.S. Green Building Council. Typically, demolition and construction debris accounts for 15–20 percent (in some places, up to 40 percent) of municipal solid waste in landfills. According to some estimates, as much as 90 percent of this waste could be reused or recycled.



BUILDING GREEN

Building green helps reduce negative impacts on the environment and preserve the Earth’s resources for future generations. Building green doesn’t necessarily mean your home has to be more expensive or that you need to use alternative materials and methods. In fact, when you build green you can often reduce your overall expenses by using traditional materials in efficient and environmentally friendly ways.

SELECTING YOUR PROPERTY

- When selecting a site to build upon, choose one that is the best for both you and the environment.
- Avoid building in environmentally sensitive locations, such as wetlands, flood zones, hurricane-prone areas and endangered wildlife habitats.
 - Check on the proximity to public transportation, community resources and bike trails to reduce the need to drive.
 - Consider developing an infill or greyfield site—a site where a house was previously built and where water, phone and sewer lines may already be in place—instead of clearing undeveloped lands, known as greenfield sites. You could minimize the amount of excavation needed by reusing an existing foundation.

POSITIONING YOUR HOME ON THE SITE

- The orientation of your house on the site can affect the amount of energy it consumes.
- Position the house on the site to best capture sunlight in the winter, and reduce heat gain in the summer where trees provide shade. Orienting the house on an east-west axis is usually best.
 - Be realistic about how much space you need. A smaller house will require less material to build, as well as less energy to heat and cool over the entire life of the structure.
 - Build up instead of out. A multi-story house has less roof and foundation area than a one-story house of the same square footage, is more efficient to heat, and has ceiling framing that doubles as floor framing for the floor above.
 - Reduce heat island effects. Select light-colored roofing. Limit paved areas around the house, or keep paved areas light colored or shaded.



Living Green

DESIGNING YOUR HOME

- Whether you prefer a traditional or modern look, design your home with materials that are friendly to the environment.
- Use materials that are easily recyclable, reusable, renewable, durable, affordable and low maintenance.
 - Maximize insulation, weather strip door openings and seal ducts.
 - Install high-performance windows and energy-efficient appliances, and consider solar effects when locating windows.
 - Choose high-efficiency (90 percent and higher) heating and cooling equipment with a seasonal energy efficiency ratio (SEER) of 14 or higher. Put in programmable thermostats to minimize energy use, especially when nobody is home.

PROTECTING YOUR WATER RESOURCES

- Be mindful to conserve water and protect the water supply during and after construction.
- Control soil erosion during the building process. Be sure to manage run off and sedimentation so they do not affect storm water systems.
 - Design the landscape around the home to limit long-term water and energy use and preserve the natural environment. Minimize water-intensive landscaping, lawn areas and grasses and replace with native plant species.
 - Consider installing a rain water and run off collection system and a gray water recycling system to water lawns and gardens.
 - Select low-consumption or dual-flush toilets; low-consumption or waterless urinals; and low-flow lavatory, sink and shower faucets.